

## Animas

**Megan\_Dudevoir** to: Forrest.Sabrina

01/03/2011 11:03 AM

From: Megan\_Dudevoir@URSCorp.com

To:

Cc: Rebecca\_Laramie@URSCorp.com

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Hi Sabrina,

I have been working with Kent to get the validated data back, it looks like for the sediments we will get the validated packages back by the end of the week. Kent mentioned that you were planning on sending him the hard copy of ESAT water data via inter office mail, but he has not gotten that yet. I just wanted to check if that had been sent over yet, or if we need to start searching for it in a mail black hole. He said that the official hard copy is what he needs to send the water data out for validation, so water data has not been validated yet.

With us not having validated data yet, it is unlikely that we will be able to have everything validated and synthesized for Bryan to prepare a quick score before he leaves us. I talked to Rebecca and we came up with a few options for the quick score. Bryan is willing to complete if after he leaves us, but we would have to give that to you as something unofficial that would be for your informational purposes only (not for dissemination), as Bryan would no longer be a UOS employee. We could also have the option of setting Bryan up as a sub contractor, though that would require creating a contract which would probably take some time and funds. A third option would be to have someone else in UOS, probably Barry, complete the quick score when we get the validated data back. We can go with whatever option you feel would best fit your needs.

I was hoping we could touch base this week about the data synthesis you need from the ESAT data. I've been out and haven't gotten started on that yet. I'd like to go over what you need from us, as far as which sampling locations and dates you'd like analyzed and how you'd like the information displayed. I will be here all week, so feel free to give me a call or shoot me an email when you're available.

Megan J. Dudevoir

URS Operating Services, Inc.

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**Forrest.Sabrina@epamail.epa.gov**

12/27/2010 05:18 PM

To: megan\_dudevoir@urscorp.com

cc: andrew\_longworth@urscorp.com

Subject: Fw: Excel spreadsheets of EPA/BLM collected water quality data

Hi Megan, I don't know if Andrew is getting email anymore, but wanted to be sure you all had this bit of information from the ARSG and the Sunnyside Mining Corp. representative who was involved in the watershed for years.

Sincerely,

Sabrina Forrest

NPL Coordinator &

Site Assessment Manager

U.S. Environmental Protection Agency

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----- Forwarded by Sabrina Forrest/R8/USEPA/US on 12/27/2010 05:17 PM -----

From: "William Simon" <wsimon@frontier.net>

To: Sabrina Forrest/R8/USEPA/US@EPA, <pbutler@wildblue.net>, "Fearn Engineering" <fearneng@rmi.net>

Date: 12/16/2010 03:57 PM

Subject: RE: Excel spreadsheets of EPA/BLM collected water quality data

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Sabrina, here is what Larry Perino had to say concerning 1999 and 2002, 2003 treatment of CC.

Bill-

I haven't studied the attached data but my guess is everyone is somewhat right. Not sure of exact dates but CC was treated into 2003 except for a short period in 1999. I am guessing that was June-Oct or Nov. Whether that contributed to the spike you are talking about, I don't know. The CC flows treated did vary from all of CC in winter to just a portion in summer. The flows treated ranged from ~450 gpm to ~ 1600 gpm. This included both CC and American Tunnel so if American Tunnel was < 90 gpm then CC was the rest.

Larry

So that 1999 spike may be related to a not treating during that Nov. period. You might want to forward this to Andrew as well.

Bill

-----Original Message-----

From: Forrest.Sabrina@epamail.epa.gov

[<mailto:Forrest.Sabrina@epamail.epa.gov>]

Sent: Wednesday, December 15, 2010 1:09 PM

To: wsimon@frontier.net; pbutler@wildblue.net; Fearn Engineering

Subject: Fw: Excel spreadsheets of EPA/BLM collected water quality data

All, Here are the START clarifications. Please see if the attached

portion of the Church document helps to see where Andrew Longworth was coming from.

Sincerely,

Sabrina Forrest

NPL Coordinator &

Site Assessment Manager

U.S. Environmental Protection Agency

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----- Forwarded by Sabrina Forrest/R8/USEPA/US on 12/15/2010 01:07 PM

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From: Megan\_Dudevoir@URSCorp.com

To: Sabrina Forrest/R8/USEPA/US@EPA

Cc: Andrew\_Longworth@URSCorp.com

Date: 12/09/2010 01:56 PM

Subject: Re: Fw: Excel spreadsheets of EPA/BLM collected water quality data

Sabrina,

To answer Bill's questions:

1. I am not sure about the broken link, I will talk with Andrew about that on Monday.
2. The data we used was from November of each year. We went with data from one month to make trends easier to see by eliminating seasonal variation. Also, this would eliminate any variation caused by times of year that Sunnyside Gold Corp was treating Cement Creek.
3. In the Church report on page 74 there is a section which describes the history of reclamation activities in Cement Creek. This indicates that between fall of 1996 and 1999, during non-runoff periods, Cement Creek was diverted and treated to mitigate short term impact of remedial activities. The end of this treatment in 1999 would explain the jump. I have attached a scan of page 74.

Let me know if you need anything else.

Also, the sampling trip report is being reviewed and will get to you early next week.

Megan J. Dudevoir  
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Forrest.Sabrina@epa  
mail.epa.gov

To  
12/09/2010 12:30 PM andrew\_longworth@urscorp.com,  
jeremiah\_ervin@urscorp.com,  
megan\_dudevoir@urscorp.com  
cc

Subject  
Fw: Excel spreadsheets of EPA/BLM  
collected water quality data

All ( I realize Andrew may not be available any longer), Can you help me  
get answers for Bill Simon's questions?

Sincerely,

Sabrina Forrest  
NPL Coordinator &

Site Assessment Manager  
U.S. Environmental Protection Agency  
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----- Forwarded by Sabrina Forrest/R8/USEPA/US on 12/09/2010 12:29 PM  
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From: "William Simon" <wsimon@frontier.net>  
To: Sabrina Forrest/R8/USEPA/US@EPA, "'Peter Butler'" <pbutler@wildblue.net>  
Cc: "'Fearn Engineering'" <fearneng@rmi.net>, <andrew\_longworth@urscorp.com>, Steven Way/R8/USEPA/US@EPA  
Date: 12/09/2010 09:53 AM  
Subject: RE: Excel spreadsheets of EPA/BLM collected water quality data

I don't understand your "broken link" mentioned below?

I also don't see that Andrew or Church explain what happened in 1999 to cause that significant jump in Cd, Cu, and Zn. Since the data and dates are

not included I can't be sure but it might have something to do with the time of year the samples were taken -- SGC treated all of CC at some times of year (low flow) and none of CC at other times of year. I need more information-- what months or is this a plot of yearly averages?

Bill

-----Original Message-----

From: Forrest.Sabrina@epamail.epa.gov

[\[mailto:Forrest.Sabrina@epamail.epa.gov\]](mailto:Forrest.Sabrina@epamail.epa.gov)

Sent: Tuesday, December 07, 2010 8:24 AM

To: Peter Butler; 'William Simon'

Cc: 'Fearn Engineering'; andrew\_longworth@urscorp.com;

Way.Steven@epamail.epa.gov

Subject: RE: Excel spreadsheets of EPA/BLM collected water quality data

Peter and Bill, I just want to follow up to see if the ARSG web site does in fact have a broken link or something for the 2004-2009 data the START staff were looking for when EPA was outlining how to possibly respond to Todd Hennis' letter. Also, Andrew Longworth noted the following with regard to the 1999 spike:

"I was digging through some data/reports here and found something to explain the 1999 jump in concentrations. It turns out that between 1996 and 1999 water from cement creek above American Tunnel was treated then between 2002 and 2003 water from Gold King was treated. The charts I provided were based on treatment stopping in 2003 and did not take into account the switch between the two. I found this information in the Stanley Church 2007 "The effects of acidic mine drainage from historical mines in the Animas River watershed, San Juan County, Colorado" report."

Here are the draft charts that Andrew put together for us. Note that we had him average the chronic water quality standards to simplify the visuals, since there is alot going on.

(See attached file: CadmiumCC48A72A68Linear.pdf)(See attached file: CopperCC48A72A68Linear.pdf)(See attached file: ZincCC48A72Linear.pdf)



Lastly, is the ARSG responding to Todd's follow up letter? I don't believe EPA will do so; we will respond to relevant issues as needed in future meetings with the County and community. Regarding a follow up meeting with them, I think it would be beneficial to wait until we have some idea of what the November data tell us about overall listability. Therefore, I hope that could happen in February, but it may take until March.

Thanks!

Sincerely,

Sabrina Forrest

NPL Coordinator &

Site Assessment Manager

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From: "Peter Butler" <pbutler@wildblue.net>  
To: Sabrina Forrest/R8/USEPA/US@EPA, "'William Simon'"  
<wsimon@frontier.net>, "'Fearn Engineering'"  
<fearneng@rmi.net>  
Date: 11/19/2010 09:55 AM  
Subject: RE: Excel spreadsheets of EPA/BLM collected  
water quality  
data

Thanks! Sabrina.

From: Forrest.Sabrina@epamail.epa.gov [  
<mailto:Forrest.Sabrina@epamail.epa.gov>]  
Sent: Thursday, November 18, 2010 4:29 PM  
To: William Simon; Peter Butler; Fearn Engineering  
Subject: Excel spreadsheets of EPA/BLM collected water quality data  
Importance: High

All, Sorry for the delays in getting these files to you. These are all  
the data that have been loaded into the Scribe database so far.

I have asked for the START contractor to help get some "pictures" of the  
data we have so far with regard to looking at Cement Creek  
concentrations and then have A72 looked at compared to standards, but I  
imagine you may be already working on this to show the commissioners the  
relative impacts from Cement on the Animas.

Do you have the flow data that Bill Schroeder may have passed along? If  
not, it is in the Summary file.

I have asked our TMDL staff to help get flow duration curves generated  
too; they are supposed to help us understand where the loads are coming  
from at high, moderate, and low flow. I have much to learn..

Sabrina

(See attached file: church p 74.pdf)